

THE CAPACITY OF OUR CANADIAN BLAST FURNACES AND STEEL PLANTS SHOULD BE INCREASED FROM 2,000,000 TONS OF PIG IRON AND STEEL TO ABOUT 4,000,000 TONS, WORTH ABOUT \$200,000,000 YEARLY.

T H E DOMINION GOVERNMENT SHOULD GRANT A BOUNTY OF AT LEAST FIFTY CENTS PER TON ON ALL IRON ORE MINED AND SMELTED IN CANADA.

T H E GOVERNMENT OF CANADA, AS OWNERS OF THE CANADIAN NORTHERN RAILWAY, SHOULD ERECT A LARGE BLAST FURNACE AND STEEL PLANT AT BOTH PORT ARTHUR AND VANCOUVER.

A L M O S T ALL THE BLAST FURNACES AND STEEL PLANTS ARE IN EASTERN CANADA EAST OF LAKE SUPERIOR.

ISSUED BY THE
PORT ARTHUR BOARD OF TRADE

DECEMBER, 1918

THE FOLLOWING RESOLUTIONS WERE UNANIMOUSLY
PASSED BY THE BOARD OF TRADE OF THE
CITY OF PORT ARTHUR

BOUNTY ON IRON.

Whereas, the importance and growth of the iron and steel industry in Canada warrants exceptional measures being taken to make it as far as possible self-sustaining in regard to its supply of raw material.

And whereas, during the last decade over 90 per cent. of the product of the Canadian furnaces was from imported ore, of which 58 per cent. came from the United States Lake Superior mines, and 41.9 per cent. from the Newfoundland mines.

And whereas the proportion of domestic iron ore smelted in Canada has gradually declined until, in 1917, it was only 4.23 per cent.

And whereas the iron ores of Canada are sufficiently known to warrant the statement that there is a large tonnage that could be made available for use by some preliminary treatment, if the increased cost of such treatment were compensated for by a bounty, as the ores of the Atikokan range require roasting, Loon Lake ores hand sorting, Magpie Siderite ores calcining, and Moose Mountain and Bathurst ores concentrating.

And whereas extensive areas of promising iron formations have been located in many parts of Canada, and it is reasonable to expect that the concentrations of merchantable ore will be found in these ranges when systematically exploited, especially on the Steep Rock, Mattewan, Kamistiquia, Nipigon, Little Long Lake and Michipicoten district.

And whereas the granting of a bounty on iron ore would stimulate the prospecting of these areas, and probably secure the active operation of several mines already developed and equipped at a heavy expenditure in Northern Ontario and provide remunerative freight traffic to several sections of the Canadian Government railways that are at present apparently unproductive,

And whereas the increased employment of mine operators, explorers and transportation employees, together with the general development of our iron mining districts would so materially increase the customs receipts of Canada that the proposed bounty would be a very small tax (if any) on the finances of the Dominion,

Therefore, the Board of Trade of the City of Port Arthur would respectfully urge that the Government of Canada enact the necessary legislation granting a bounty of 50 cents per ton on all iron ore mined and smelted in Canada, the same to be made payable to the mine operator during a period of at least ten years.

And further, that a copy of this resolution be forwarded to Sir Robert Laird Borden, premier of Canada; Frank H. Keefer, Esq., M. P., and to the chairman of the repatriation committee for the Dominion of Canada.

DOUBLE THE OUTPUT OF OUR STEEL PLANTS.

Whereas Manitoba, Saskatchewan and Alberta have about 200,000,000 acres of arable land, of which only about fifteen per cent. is under cultivation, producing a crop worth about \$518,000,000 in 1916,

And whereas the population of Western Canada is now over 2,000,000, and in ten years has increased 174 per cent., whereas that of Eastern Canada has increased only 17 per cent.,

And whereas there are about 19,000 miles of railway in Western Canada radiating westward from the City of Port Arthur, and manufacturing plants representing over \$308,000,000,

And whereas the United States Steel company some years ago erected a large steel plant at Duluth at a cost of over \$25,000,000 to supply the requirements of the Western States and is about to proceed with the erection of additional mills at a cost of about \$15,000,000,

And whereas the Canadian Northern railway, which is now owned and operated by the Dominion of Canada, furnishes railway facilities to five ranges from 29 to 128 miles of the City of Port Arthur,

And whereas the City of Port Arthur, evidently, holds almost equal facilities for the location of a steel plant to supply the requirements of Western Canada as Duluth does for the Western States,

And whereas practically all the steel plants in the Dominion are in Eastern Canada and have received \$16,000,000 in bounties,

And whereas between 1906 and 1915 Canada imported iron and steel products to the value of about \$632,000,000,

Therefore the Board of Trade of the City of Port Arthur would strongly urge that the capacity of our steel plants be materially increased so as to supply our own requirements, and materially aid in the development of our iron mines, thus furnishing much needed traffic for our railways, and attractive employment for our returned soldiers,

And urge also that the Dominion Government, as owners of the Canadian Northern Railway company, erect a large blast furnace and steel plant in the City of Port Arthur costing at least \$15,000,000, as planned four years ago by the capitalists formerly identified with the said railway enterprise, or guarantee the interest for thirty years on eighty per cent. of the actual capital invested in such a plant, or grant the same guarantees as have been given to our various dry docks and shipbuilding plants to the extent of about \$13,000,000.

And further that a copy of this resolution be forwarded to Sir Robert Laird Borden, premier of Canada; Frank H. Keefer, Esq., M. P., and to the chairman of the repatriation committee for Canada.

The Rapid Development of our Iron Mines and the extension of our Steel Industries would materially aid Canada in solving her Railway Problems and lay a firm foundation for future success.

The following memorandum has been prepared by the Board of Trade of the City of Port Arthur:

The development of our iron mines and the rapid increase of the capacity of our blast furnaces and steel plants at the logical and strategic points in Western as well as Eastern Canada are of national importance and it is earnestly desired that all Canadians receiving a copy of this memorandum will read the same carefully and "do his bit" towards accomplishing these very important objects and thereby secure increased traffic for our railways and attractive and remunerative occupations for our Returned Soldiers.

In 1917, about 30,000,000 acres under cultivation in Canada produced a crop worth \$1,144,636,450. In the provinces of Manitoba, Saskatchewan and Alberta, there are about 31,000,000 acres patented, but lying vacant and unused. It is estimated that there are over 218,000,000 in these three provinces available for cultivation. Canada has spent more per capita on transportation than any other country in the world, and has now a mileage of nearly 40,000 miles of railway. This is a greater mileage than that of either Great Britain or France, and is almost equal to that of Russia and Germany, respectively.

Canada has granted to railways about 43,000,000 acres and given \$283,000,000 in cash subsidies. In addition to this, she has spent about \$500,000,000 in constructing or acquiring railway lines, besides guaranteeing railway debentures to the extent of about \$400,000,000. Canadian railways show an investment of nearly \$2,000,000,000. Our railways should earn about \$100,000,000, but their actual revenue is about \$52,000,000, which leaves an annual deficit of about \$48,000,000. All Canadian interests should put forth every possible effort to create a remunerative traffic for this extensive railway mileage, so as to secure a satisfactory return to the Dominion on this very large investment.

The Canadian Government should encourage in every possible way the immediate development of the natural resources tributary to the Canadian Northern, and other railway lines owned and operated by the Dominion.

Canada's total debt will soon exceed \$1,500,000,000 and she should plan to manufacture as far as possible all her own requirements and endeavor to secure at least 500,000 intelligent immigrants from Great Britain and the United States each year.

By doubling her population she will enhance the value of farm and city property, and practically reduce her debt one-half.

While it is essential to offer the most attractive proposition to settlers to occupy and develop our farm lands, yet our iron mines and steel plants should be developed and extended so as to supply all our own requirements, and not depend on China, Japan or the United States for our iron and steel products.

The Province of Ontario has already produced 4,349,144 tons of iron ore, worth about \$20,000,000 at the blast furnaces. Of this amount 2,200,138 tons were exported to the United States.

C. R. Van Hise, in the 21st Report of the United States Geological Survey, (1900), part 3, Pages 409-412, says: "So far as one can see, there is no known geological reason or cause why iron ores should not extensively exist on the Canadian side of Lake Superior, except that it may be possible that, on account of glacial erosion, the production of high grade ore may be less in Canada than in the districts of similar size and geological position on the United States side of the boundary. It cannot be doubted that in the future, important quantities of iron ore will be exploited in the Canadian Lake Superior Region.

"Doubtless, also, this exploitation would have begun many years ago, were it not for the duty which ores mined in Canada must pay when entering the United States."

To prove up an extensive tonnage of iron ore, it is necessary in most cases to carry on extensive diamond drilling operations. While the United States has drilled some 7,000,000 feet to prove up their various ranges, only 50,000 feet of drilling have been done on the iron ranges in Ontario. This small amount of drilling has proven that the iron ore extends down over 1600 feet in the Josephine Iron Mine in the Michipicoten district, and to over 400 feet in the Nipigon range; and that there are about 175,000,000 tons of iron ore in the four or five ranges immediately tributary to the City of Port Arthur alone.

LOON LAKE RANGE—25,000,000 TONS.

A reliable engineer estimates that the diamond drilling on the Loon Lake Iron Range has proven up about 25,000,000 tons of hematite ore, and that the formation thereof is practically similar to that of the famous Messabi Range. Of this quantity, about 2,118,000 tons will average, when hand sorted, at a cost of about 50 cents per ton, about 55% iron; .01 or .02% Phosphorus, and 1.5% Lime. This range is adjacent to the Canadian Northern railway, which is owned and operated by the Canadian Government, and it is only about 30 miles east of Port Arthur.

THE MATTEWAN AND KAMINISTQUIA RANGES— 150,000,000 TONS.

The Kaministiquia Iron Range is about 35 miles west of Port Arthur, and the said Government Railway runs along this range for some 20 miles.

The Mattewan and Kaministiquia Ranges show extensive outcrops of banded iron formation—jaspilites—running from 35 to 40% iron. The experiments made at the Dominion Testing Laboratories, Ottawa, show that by coarse crushing and jigging and a concentration of 1.2, a product running 50% iron may be obtained from the Kaministiquia ores

at a cost of about \$3.00 per ton concentrate at the mine. An approximate estimate from these ranges is 150,000,000 tons.

Magnetic ores containing only 30% iron to the extent of about 2,000,000 tons per annum are concentrated magnetically by the Witherbee-Sherman & Co., Inc., at Mineville, in the State of New York, U. S. A.

THE ATIKOKAN IRON RANGE—25,000,000 TONS

The Atikokan Iron Range is about 128 miles west of Port Arthur on the said Government Railway Line. The diamond drilling and other mining development have proven up about 25,000,000 tons of iron ore, which will average about 55% iron. It costs about 50 cents per ton to roast this ore.

Diamond drilling done some years ago proved up a valuable deposit of hematite ore near Steep Rock Lake, on the said line of railway.

NEPIGON AND LITTLE LONG LAKE RANGES VERY PROMISING FOR HEMATITE ORE

The Nepigon Iron Range is about 135 miles east of Port Arthur, and the Government Railway line runs along this range and the Little Long Lake Range for nearly 70 miles. Over five promising iron properties have been located and more or less developed on these ranges. A small amount of diamond drilling was done some years ago on the Nepigon Range before the railway facilities were secured, and this work proved that the ore went down over 400 feet.

A prominent engineering firm of international standing reported on one of these properties that the outcrops of iron ore were from 8 to 28 feet wide for a distance of about 1350 feet, and that the ore was all that could be desired.

All these ranges are tributary to the Canadian Northern Railway, and the City of Port Arthur is the logical point for a blast furnace and steel plant to utilize the iron ore from these extensive ranges.

The Moose Mountain Iron Mine, some 20 miles north of Sudbury, is said to have some 100,000,000 tons of magnetic iron ore proven up, which, when concentrated, carries 63% iron.

Iron mining capitalists of extensive and successful experience (such as the late Captain Sellwood, of Duluth, and John W. Gates) were interested in the development of this property, together with Messrs. Mackenzie & Mann, the former owners of the Canadian Northern Railway Company.

Messrs Mackenzie & Mann and British capitalists planned to erect a \$15,000,000 steel plant at the City of Port Arthur, with the object of utilizing the iron ore in the adjacent ranges, and supply the Western market with pig iron and steel products; and create additional remunerative traffic for their railway.

This development was also intended to materially aid their steamship lines, which would carry coal from Lake Erie ports to Port Arthur, for coke for the steel plant, and for a return cargo, carry grain to Key Inlet and Moose Mountain iron ore from Key Inlet to Lake Erie ports, thereby securing the lowest possible freight rate on the different cargoes.

The Michipicoten Iron Range is Only About 260 Miles by Boat from Port Arthur.

The Magpie Iron Mine in this district has about 10,000,000 tons of siderite ore proven up. It only contains about 35% iron in its natural state, but when calcined it carries 50.1% iron; .013 phosphorus, 7.96 lime, and 2.74 Manganese, and is an excellent ore and of bessemer grade. Notwithstanding the low price of iron ore in 1914-15, this mine shipped over 200,000 tons during that period, and up to the present date has produced over 650,000 tons, the larger portion of which has been exported to the United States. Many millions of tons of similar ore have been proven up in the Helen Iron Mine, Josephine and Bartlett properties. The Helen Iron Mine on the same range has shipped over 2,645,000 tons of high-grade hematite ore, averaging about 59% iron, of which about one-half was exported to the United States, and a duty of 15 cents per ton paid on a considerable percentage of the exported ore.

The Josephine Iron Mine on the same range as the Helen, has been diamond drilled, and an ore body of over 1,250,000 tons of hematite ore has been proven in the short distance of 850 feet of the range. The ore continues to a depth of over 1600 feet. There is over a mile of very promising iron range on this property, and the other deposits proven by the said diamond drilling, in the opinion of the expert carrying on the operations, indicated that the ore body might extend a distance of about 3,000 feet, which would indicate a possible tonnage of about 3,000,000 tons. Most of the Josephine ore is estimated to average 59% iron, and .045 phosphorus, and of a bessemer grade.

Near Bathurst in the Province of New Brunswick, it is claimed, that there are over 20,000,000 tons of magnetic ore somewhat similar to the Moose Mountain ore. Some years ago the mine was equipped and a concentrating plant erected capable of handling a large tonnage.

In British Columbia, experts estimate that there are millions of tons of iron ore in that province and that pig iron can be produced from domestic ore very much below the average price charged for imported pig iron. Some months ago the Legislative Assembly of the Province of British Columbia granted a bounty of \$3.00 per ton on pig iron made from B. C. ore.

Lately the daily press reports that an important deposit of bog iron ore is to be worked in the vicinity of Mons, on the P. G. E. Railway, in B. C., and that a test shipment of 5,500 tons had already been made to the Irondale blast furnaces in the United States and found to be satisfactory. It is estimated that already about 600,000 tons of ore have been proven up.

To encourage the erection of blast furnaces and steel plants in Nova Scotia and Ontario, a bounty of \$3.00 per ton was paid on pig iron made from Canadian ore, and \$2.00 on pig iron made from imported ores. Additional bounties were paid on the steel products.

About \$17,000,000 were paid out by the Dominion of Canada to these industries in Nova Scotia and Ontario; but only about 5% of this amount was paid in respect of pig iron made from Canadian ore, as at that time our iron mines were not sufficiently developed to take full advantage of these bounties.

Our blast furnaces and steel plants are almost all in Eastern Canada and represent an investment of about \$125,000,000, with an annual output, at present prices, of about \$100,000,000.

With these plants in existence, when the Great European War broke out, Canada was enabled to successfully manufacture hundreds of millions of dollars worth of war material at very profitable prices. During the ten years 1906-1915, Canada imported from the United States iron and steel products of the value of about \$632,000,000. In 1916, these imports amounted to about \$156,000,000. The electric furnaces of Canada have now a capacity of about 100,000 tons of high-grade steel per annum.

THE IRON AND STEEL INDUSTRY THE LARGEST INDIVIDUAL INDUSTRY IN THE UNITED STATES

The value of the output of the iron and steel industry in the United States in 1917 would be about \$3,500,000,000. The capacity of these plants has been increased during the past six years from 33,000,000 tons to about 50,000,000 tons, which would be about 25 times greater than that of Canada.

The United States Steel Company produces about 45% of the entire output of the United States. In 1917 this company had assets amounting to \$2,449,550,206, and their output for that year amounted to \$1,683,962,552. They handled over 69,172,000 tons of iron ore, coal, and limestone in the production of 15,000,000 tons of pig iron. They paid \$263,385,502 in wages to their 268,058 employees, who all received, on an average, \$4.10 per day. This Company, in 1917, paid in war taxes to the United States Government \$212,467,249.

In 1914, all the railways in Canada handled less than 101,395,000 tons of freight, while this one company last year contributed over 69,000,000 tons of freight for transportation.

Millions of Dollars were spent to secure the economical production of Iron Ore in Northern Ontario.

The payment by the Dominion Government of bounties on pig iron made from Canadian ore eventually induced experienced Canadian and American capitalists interested in securing additional traffic for the Can-

adian Northern Railway and the Algoma Central & Hudson's Bay Railway systems, to spend millions of dollars in exploring, diamond drilling, and equipping iron mines in the Atikokan, Michipicoten and Moose Mountain Iron Ranges. Branch lines of railways, ore docks, and terminals to handle the ore were constructed. Water powers were developed to secure cheap hydro-electric power for the operation of the mines. Expensive modern plants for the calcining, roasting or concentrating of these ores were erected. These mines were developed, apparently with the expectation that about one-half of the output would be exported to the United States, and the necessary coal for the steel industries imported as return cargo; and thus secure low freight rates on both the coal and the iron ore. It was planned that this large ore tonnage would furnish remunerative traffic to portions of their railway lines in great need thereof. The average price of Old Range Bessemer ore, carrying 55% iron content, at Lake Erie ports during the eight and sixteen years respectively, prior to 1914, was about \$4.57 per ton. In 1914 the price of iron ore was lowered from \$4.40 per ton in 1913, to \$3.75 in 1914. The Messabi non-bessemer ore carrying 51.5 per cent. iron was reduced from \$3.40 to \$2.85. The Newfoundland ores are non-bessemer and average about 52% iron. Practically all the iron mines in Canada ceased to ship ore in 1914, except the Magpie Iron Mine, as they could not profitably export ore at \$3.75 per ton; and there was no duty levied on American ore; and the former iron bounties were not renewed. During the previous 16 years, the price of iron ore was lowered, apparently below cost price, periodically, every five years or so, for only one year; but in 1915, the price was still kept down to \$3.75 per ton. Since then, the price of iron ore has been increased to \$4.29 per ton in 1916, \$5.75 in 1917, and \$6.65 in 1918. If the Ontario iron mines were paid a bounty of about 50 cents per ton on iron ore, or if a duty of 15% ad valorem were placed on American ore, to prevent unfair dumping from the Messabi Range, and the Canadian railways charged the same rate per ton per mile as the American railways are compelled to do, it would appear reasonably clear that these iron mines, already equipped, could operate at a fair profit, and produce 1,000,000 tons of iron ore annually. The blast furnaces and steel plants in Ontario are conveniently located to secure American ore of such quality and in such quantities as and when they require same, without being called upon to make any capital expenditure whatever. During the period of 1912-13, the price of pig iron and steel products was forced down, apparently, below cost price, and most of the Canadian steel industries were in a most precarious position financially; one or two companies actually went into liquidation. About the same period, strenuous efforts were put forth by American capitalists to acquire control of our steel industries.

THE IRON AND STEEL INDUSTRIES SHOULD BE THE LARGEST INDIVIDUAL INDUSTRIES IN CANADA.

The Government of Canada should adopt the necessary policies and take the necessary steps to have the present capacity of about 2,000,000

tons of pig iron and steel increased to 4,000,000 tons, and secure the immediate development and operation of our various iron mines, which would furnish much needed traffic for our railways, and secure to Canada finished products at prices that ought to compare favorably with the average prices paid for imported articles, and supply attractive and remunerative employment for our returned soldiers. The Dominion Government as owners of the Canadian Northern Railway should erect a large blast furnace and steel plant in the City of Port Arthur, costing at least \$15,000,000, as planned four years ago by the capitalists formerly identified with that enterprise, or guarantee the interest for 30 years on 80% of the actual capital invested therein; or grant the same guarantees as have been given to our various dry docks and shipbuilding plants to the extent of about \$13,000,000.

PORT ARTHUR SHOULD BE THE PITTSBURG OF WESTERN CANADA.

About 63% of the area of Canada lies west and north of Port Arthur. About half of the Canadian railway mileage, some 20,000 miles of railway, radiates westward through the Western Provinces to the Pacific Ocean. In 1916, Manitoba, Saskatchewan and Alberta alone had a population of 1,698,000.

In the ten years preceding 1911, the population of Western Canada increased about 174% ; while that of Eastern Canada increased only about 17%. The late Lord Rhondda predicted that in 15 years Canada's population would double, and in 50 years that it might be as great as that of the United Kingdom itself. In 1916, the three Western Provinces had \$308,206,912 invested in manufacturing plants, and Winnipeg alone had 420 industrial plants, with an output worth \$94,000,000.

Winnipeg and Vancouver now hold forth and fifth places, respectively, among the industrial cities of Canada.

Port Arthur is the farthest west point (until Vancouver is reached) for the assembling of iron ore, coal and flux for the production of pig iron and steel billets. The United States Steel Company expended, some years ago, over \$25,000,000 in a large modern steel plant in the City of Duluth, to supply the requirements of the Western States. This plant can produce iron and steel products cheaper than the Pittsburg plants can, as the freight on the Pittsburg products to Duluth adds about 25% to the original cost thereof. This company is now proceeding to spend \$15,000,000 more in building wire, nail, and other steel mills in the City of Duluth.

Port Arthur is equally well located for the purpose of supplying iron and steel products for Western Canada as Duluth for the Western States, and can secure Messaba iron ore cheaper than any of the existing plants in Canada..

The local requirements of British Columbia, the promising markets for steel products in China and Russia, and Imperial interests would apparently justify the Government of Canada in securing the erection of a blast furnace and steel plant on the Pacific Coast.

The Cities of Port Arthur and Fort William have extensive and varied industries, established at the head of the Great Lakes, comprising some thirty-four grain elevators, with a capacity of over 54,000,000 bushels, extensive coal docks, shipbuilding plants, a large modern car plant, a pulp mill, wagon works plant, a blast furnace and various other plants. Promising mineral ranges are directly tributary to our cities and substantial shipments of copper and iron pyrites have been made from several mines.

The various steamship lines, three transcontinental railways, the extensive Hydro-electric power, vast timber, mineral and agricultural resources, combined with the strategic position for the assembling of ore, coal and flux, should secure for Port Arthur one of the largest steel plants in the Dominion of Canada.

There are about 600,000 acres of arable land suitable for dairying and mixed farming tributary to the said cities. Large sums of money have been expended in building lines of railway, main highways and branch roads.

During the ten years preceeding 1911 the population of these townships increased over 280 per cent.

The report of the Bureau of Industries for the Province of Ontario for 1915 shows that the average value per acre for all field crops in Thunder Bay District was \$23.04 per acre, and in the whole Province of Ontario \$21.58. Less than six per cent. of this vast area is under cultivation.

BOUNTIES OR A PROTECTIVE TARIFF NECESSARY TO DEVELOP OUR MINES AND INDUSTRIES.

To enable the coal mines of Nova Scotia to exist and pay large royalties into the Treasury of that Province, (now amounting to about \$700,000 each year) the Dominion has, since 1879, imposed a duty of about 50 cents per ton. on all bituminous coal imported into Canada. These duties aggregate over \$50,000,000; and in 1914, amounted to \$5,500,000. This amount was principally paid by Ontario and Manitoba.

The bounties of \$1,900,000 paid by the Dominion on lead to secure the profitable operation of the silver-lead mines of British Columbia enabled these mines to produce over \$70,000,000 worth of silver and lead in that Province. During the ten years prior to the war, the Public Works Department spent about \$100,000,000. Up to and including 1917, Canada has spent over \$24,979,000 through its Immigration Department to secure settlers for the farms of Canada. In the last ten years the Department of Agriculture has spent over \$8,000,000. Some

millions of dollars have been spent in building Government Grain Elevators. The Homestead lands given to the settlers in the Western Provinces for \$10 per homestead would have brought about \$75,000,000 into the Treasury of the Dominion if these lands had been sold at the prevailing prices paid for adjacent railway lands.

To secure the erection of a plate mill at Sydney, N.S., the Dominion Government purchased about \$50,000,000 worth of ships' plate required for the building of steamships to be owned and operated by the Canadian Northern Railway Co.

OTHER COUNTRIES GRANT BOUNTIES TO ENCOURAGE THEIR IRON AND STEEL INDUSTRIES AND SHIPBUILDING PLANTS.

The Commonwealth of Australia pays a bounty of \$3.00 per ton on pig iron produced from domestic ores.

The Japanese shipbuilding bounty is \$10 per gross ton for steel steamships of over 1,000 tons; and in addition, \$2.50 for each indicated horsepower developed by Japanese-built machinery. Since the bounty took effect, the Japanese mercantile tonnage has increased from 360,000 to 1,288,853 tons. The Province of British Columbia has granted a bounty of \$3.00 per ton on pig iron produced from British Columbia ore.

THE MINES OF THE UNITED STATES FURNISH 56 PER CENT. OF THE FREIGHT TRAFFIC ON THEIR RAILWAYS.

In 1909, the products of the mines in the United States contributed over 56% of the railway freight traffic; agriculture, 10%; and manufactures, 14%.

In Canada, in 1913, the mines contributed only 38% of the railway freight traffic; agriculture, 16%, and manufactures, 14.8%.

The Canadian railways, tributary to Lake Superior ports charge almost twice as much per ton mile as the American railways do for the transportation of iron ore, owing to the smaller tonnage handled by the Canadian railways.

The Legislative Assembly of Ontario, the Associated Boards of Trade, and the Canadian Press, in 1914 strongly endorsed the granting of a bounty on iron ore by the Dominion Government.

The following resolution was passed by the Legislative Assembly of the Province of Ontario in 1914:

"That in the opinion of this House, the iron industry is one of prime importance, and its satisfactory development within our borders of national concern; that notwithstanding the fact that there are immense deposits of iron ore in Ontario and other provinces of this Dominion now lying idle or but little worked, the great and growing market for manufactures of iron and steel, and also the demand for ore for smelting purposes, are largely met by importations from abroad, especially from the United States.

"NOW THEREFORE, BE IT RESOLVED, that in the opinion of this House, the development of Canada would be stimulated, and public interest promoted by the granting of such a measure of assistance by the Parliament of Canada as would place the iron and steel industry of this country on an assured and permanent footing."

On the 25th day of February, 1914, there was passed by the Associated Boards of Trade of Ontario a resolution, reading as follows:

"WHEREAS, in 1902, Canada produced 400,000 tons of iron ore, and in 1912 produced 216,000 tons, or a reduction of 46%,

"AND WHEREAS in the Province of Ontario, the production of iron ore has decreased from 56% of the amount of iron ore used in 1901, to 6.3% in 1912,

"AND WHEREAS Canada has immense deposits of iron ore which should be developed,

"BE IT THEREFORE RESOLVED, that taking into consideration the above figures, which show so much to the disadvantage of Canada, the Dominion Government and Provincial Legislature be asked to take such measures and render such assistance to the mining or treatment of Canadian ore as will keep this immense trade in the Dominion to be developed for the benefit of the Canadian people."

The Canadian Mining Institute also passed a resolution urging action, and stating that the development of our mining deposits would add more than anything else to the economic wealth of the Dominion of Canada.

THE CANADIAN PRESS APPROVED OF THIS POLICY IN 1914

"At Ottawa, last week, a proposal was made that a bounty should be given to the producers of iron ore. The amount asked for is about 50 cents per ton on iron ore produced and smelted in Canada. That such a bounty would give a great impetus to the iron mining industry is beyond doubt. Many deposits now idle would be profitably worked. A large number of men would be given employment at mines, railways and smelters. The development of the present known deposits would doubtless lead to the discovery of others. The bounty would not only aid those who are ready to mine known ore bodies, but would result in a very thorough search for iron ore throughout the country."—The Canadian Mining Journal, 1914:

"Such a bounty would apply equally in helping to improve the ores already known, or in exploration of those of better natural grade, according to local conditions. In either case, it cannot be paid until the work is successfully accomplished, and then only in proportion as ore is produced."—The Toronto News, 1914.

"A mining population supplies a home market for the products of our farms better than any we need expect to have in the export trade. We can be great in the production of iron if we are great in the belief in ourselves, and in the efficacy of the principle of protection to that end."—The Toronto World, 1914.

"The experience of the United States and Great Britain go to show that there is an intimate relationship between the steel industry and the national prosperity. Iron and steel, like agriculture, are basic elements of commercial and industrial life. The market for steel and iron is bound to increase in Canada with the years. It would seem the part of wisdom, therefore, that the industry should be kept in a condition adequate to provide for the growth of the country's need."—The Winnipeg Telegram, 1914.

BOTH POLITICAL PARTIES AND LEADING CANADIANS HAVE APPROVED OF THE GRANTING OF SUCH A BOUNTY.

The Hon. W. S. Fielding, in introducing a Bill to increase the bounties to \$3.00 a ton, on all pig iron manufactured from Canadian ore, said: "A country which possesses large resources, and fails to develop them, would certainly not be a progressive country. In view of the results which have been accomplished by the continuance of this policy for many years, first under one Government, and then under another, even if it had cost the country a very considerable sum of money, I think a good case could be made out to justify the outlay, having regard to the importance which the iron and steel industry will always bear to the development of the business of the country."

THE COMMISSION ON CONSERVATION IN CANADA URGED THE VIGOROUS DEVELOPMENT OF OUR IRON INDUSTRY.

The following is a quotation from the First Annual Report of the Commission on Conservation of Canadian Resources: "Only a few years ago, the ironmasters of this continent would hardly look at an iron ore, if it contained less than 62% of metallic content; now ore of 50% is gladly received. We are, and will, continue to be, industrially handicapped until our iron industry is sufficiently developed to meet the demands of our country, and render us independent of outside sources for this all important metal.

"What we need is not conservation of iron ore resources, but vigorous development of our iron industry."